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**THE INFLUENCE OF TOTAL QUALITY MANAGEMENT, SCHOOL
CLIMATE AND JOB SATISFACTION ON SCHOOL PERFORMANCE IN
GOVERNMENT SCHOOLS IN PAKISTAN**



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**DOCTOR OF PHILISOPHY
UNIVERSITI UTARA MALAYSIA
2020**



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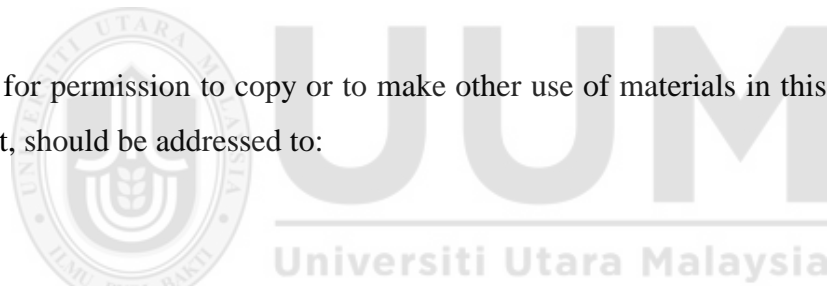
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Abstrak

Kementerian Pendidikan menghadapi beberapa cabaran utama termasuklah kualiti pengajaran yang lemah, kekurangan dan ketidakhadiran guru, persekitaran sekolah yang tidak baik, kekurangan guru-guru terlatih dan beberapa faktor lain lagi. Pengurusan kualiti menyeluruh (TQM) adalah satu alat yang digunakan kearah peningkatan kualiti dalam pendidikan, dan ianya dikatakan mempunyai hubungan yang kuat ke atas iklim sekolah, kepuasan kerja guru serta pencapaian prestasi sekolah. Ini mendorong kepada persoalan adakah sekolah-sekolah di Pakistan telah mengamalkan TQM ataupun tidak. Kajian ini dilaksanakan untuk mengenal pasti hubungan antara TQM dengan prestasi sekolah melalui dua pemboleh ubah pengantara; iklim sekolah dan kepuasan kerja. Ia juga bertujuan untuk menentukan sama ada dimensi TQM merupakan faktor peramal kepada iklim sekolah dan kepuasan kerja guru. Pendekatan kuantitatif menggunakan soalselidik telah digunakan semasa proses pungutan data manakala program SPSS versi 24 digunakan bagi menganalisis data untuk menjawab persoalan dan hipotesis kajian. Proses mediator pula diuji dengan menggunakan analisis Sobel. Dapatan menunjukkan bahawa sekolah berprestasi tinggi mempunyai tahap amalan TQM, iklim sekolah dan kepuasan kerja yang lebih tinggi, hubungan yang sangat kuat antara TQM dengan iklim sekolah dan hubungan yang sederhana kuat antara TQM dengan kepuasan kerja. Seterusnya, analisis regresi pula menunjukkan bahawa tiga (3) dimensi, iaitu penglibatan staf, komitmen pengurusan atasan, dan penambahbaikan berterusan adalah merupakan peramal utama kepada iklim sekolah. Manakala dimensi penglibatan staf, komitmen pengurusan atasan, latihan dan pendidikan, dan fokus pelanggan adalah peramal utama kepada kepuasan kerja. Analisis Sobel pula menunjukkan bahawa kedua-dua iklim sekolah dan kepuasan kerja memberikan kesan perantara yang signifikan terhadap hubungan antara TQM dengan prestasi sekolah. Kajian ini memberikan sumbangan yang bermakna ke arah meningkatkan amalan pengurusan kualiti di sekolah dengan menghasilkan suatu Model Sekolah Cemerlang yang menggabungkan kesemua pemboleh ubah terlibat dalam merealisasikan kecemerlangan pendidikan.

Kata Kunci: Pengurusan kualiti menyeluruh (TQM), iklim sekolah, kepuasan kerja, prestasi sekolah

ABSTRACT

The Ministry of Education faces several key challenges including poor teaching quality, teacher shortage and absenteeism, poor school environment, shortage of motivated and well-trained teachers, insecurity, and many other factors. Total Quality Management (TQM) is a tool used to increase quality in education and is often linked to school climate, teachers work satisfaction and schools' academic achievement. This raises the question of whether schools in Pakistan are practicing TQM. This study was conducted to identify the relationship between TQM and school performance through two mediating variables; school climate and job satisfaction. It also aims to determine if the dimensions of TQM are a determinant factor for school climate and job satisfaction. A quantitative approach using questionnaire survey was used to collect data, whilst SPSS version 24 was used to compute the data in order to answer the research questions and the hypothesis. The mediation process was examined using the Sobel test. Findings showed that high performance schools had a higher level of TQM practice, school climate and job satisfaction, a very strong relationship between TQM and school climate and a moderate relationship between TQM and job satisfaction. Furthermore, regression analysis illustrated that three (3) dimensions namely staff involvement, top management commitment and continuous improvement were the main indicators for school climate. Meanwhile, the dimensions of involvement of staff, top management commitment, training and education, and customer focus were the main predictors for job satisfaction. Sobel test showed that both school climate and job satisfaction were the mediator between TQM and school performance. This study provides a significant contribution in improving quality management practices in schools by developing an Excellent School Model that incorporates all the variables involved in realizing educational excellence.

Keywords: Total quality management (TQM), school climate, job satisfaction, school performance.

Acknowledgement

The first gratitude I owe is profoundly to Enormous ALLAH, Most Compassionate, and Most Merciful whose guidance made this academic pursuit a success. Acknowledge must also go to my supervisor Asst. Professor Dr. Siti Noor Binti Ismail whose informative guidance, encouragement and relentless support enabled me to complete this study successfully. From conceptualization to conclusion, you have amazingly supervised this work. I am grateful and look forward to more research with you in the nearest future. I shall forever remain grateful to both of my supervisor Asst. Prof. Dr. Siti Noor and Prof. Dr. Sofian Fauzee who always encourage me in my research. I am also greatly indebted to the faculty and staff members of the Collage of Arts and Sciences (SEML) for their support and assistance in making my dream a reality. I also wish to acknowledge Prof. Dr. Ahmad Bashawir bin Abdul Ghani, the Vice-chancellor. My appreciation also goes to the research respondents who participated in this study for their time and contributions.

For the purpose of data acquisition is also, I would like to express my thanks to all school administrators (principals or assistant principals) and teachers who are involved either directly or indirectly, because without their cooperation is certainly required information for this study will not be available, Similarly, who have given me permission to seek the cooperation of the school to answer questionnaires.

Finally, I wish to acknowledge my beloved wife Dr. Najia Saher who always with me in good and bad times and my family for being so supportive throughout the period of my study especially my parents (late) who's prayers always with me Thank you so much for your love and kindness. I also wish to acknowledge my friends Dr. Mohd Muslim Md Zalli and Khalid Education district officer, BWP and my all friends and family for being so supportive and helpful to me. May Enormous ALLAH always bless every one of you and me, Ameen.

Table of Contents

Permission to Use	i
Abstrak	ii
Abstract	iii
Acknowledgement	iv
Table of Contents	v
List of Tables	xii
List of Figures	xiv
List of Abbreviations	xv
List of Appendices	xvi
CHAPTER ONE INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study	5
1.3 Problem Statement	11
1.4 Research Objectives	18
1.5 Research Questions	18
1.6 Research Hypothesis	19
1.7 Framework of the Study	20
1.8 Importance of Study	22
1.9 Scope and Limitations of Study	23

1.10	Operational Definitions	24
1.10.1	TQM (Total Quality Management)	24
1.10.2	Top Management Commitment	24
1.10.3	Continuous Improvement	25
1.10.4	Customer Focus	25
1.10.5	Involvement of Staff	26
1.10.6	Training and Education	26
1.10.7	School Climate	26
1.10.8	Collaboration	26
1.10.9	Student Relationship	27
1.10.10	Teaching Innovation	27
1.10.11	Decision Making	27
1.10.12	School Resources	28
1.10.13	Job Satisfaction	28
1.10.14	High Performance School	28
1.10.15	Low Performance School	29
1.11	Summary	29
CHAPTER 2 LITERATURE REVIEW		30
2.1	Introduction	30
2.2	The Concept of Quality	30
2.3	Philosophy and Theories of TQM	32

2.3.1	Edwards Deming (1982-1986)	35
2.3.2	Philip Crosby (1979-1984)	37
2.3.3	Joseph M.Juran (1988-1989)	37
2.3.4	Ishikawa (1983-1985)	38
2.3.5	Armand V.Feigenbaum (1958-68 , 1992)	39
2.4	Dimensions of TQM	40
2.5	TQM and School Performance	45
2.6	TQM in Education	46
2.7	Studies Related to TQM	50
2.7.1	Leadership and Top Commitment	55
2.7.2	Continuous Improvement	59
2.7.3	Customer Focus	60
2.7.4	Employee Involvement	63
2.7.5	Training and Education	66
2.8	Critical Success Factors of TQM Practices	68
2.9	Finding about TQM	73
2.9.1	Factors Effect of TQM Implementation in the Industrial Field	74
2.10	Effect of TQM in Education	76
2.10.1	Factors Preventing the Implementation of TQM	78
2.11	Job Satisfaction	81
2.12	Major Theories of Job Satisfaction	82

2.12.1	Hierarchy of Need Theory	82
2.12.2	Herzberg's Two-Factor Theory	84
2.13	Studies related to TQM and Job Satisfaction	88
2.14	Studies related to Job Satisfaction and School Performance	90
2.15	Theories and Concepts of School Climate	91
2.16	Theories of School Climate	100
2.16.1	Bronfenbrenner's Ecological System Theory (1979)	100
2.16.2	Risk and Resilience Perspective	102
2.16.3	Social Cognitive Theory	103
2.16.4	Stage-Environment Fit Theory	103
2.16.5	Social Control Theory	103
2.17	Studies Related to TQM and School Climate	105
2.18	Studies Related to School Climate and School Performance	107
2.19	Summary	110
CHAPTER 3 RESEARCH METHODOLOGY		112
3.1	Introduction	112
3.2	Research Design	112
3.3	Population and Sampling	114
3.4	Research Instruments	118
3.5	Pilot Study	125
3.5.1	Validity Test	126

3.5.2	Construct Validity	127
3.5.2.1	Factor Analysis	127
3.5.2.2	EFA of TQM	129
3.5.2.3	EFA of School Climate	132
3.5.2.4	EFA of Job Satisfaction	135
3.5.3	Reliability Test.....	138
3.6	Procedure to Collect Data	139
3.6.1	Data Analysis	140
3.6.2	Data Screening	141
3.6.3	Descriptive Analysis	141
3.6.4	Data Screening and Cleaning	142
3.6.5	Normality Test	143
3.7	Multiple Regression Analysis Stepwise	145
3.7.1	Linearity	146
3.7.2	Multicollinearity	146
3.7.3	Extremes (Outliers)	147
3.7.4	Mediation Process	147
3.8	Summary of Data Analysis	150
3.9	Summary	151
CHAPTER 4 FINDINGS		152
4.1	Introduction	152

4.2	Demographic Information	153
4.2.1	Respondent's Background	153
4.3	The Level of TQM, School Climate and Job Satisfaction practices in HPS and LPS in Pakistan	155
4.4	The Relationship between TQM and School climate	158
4.5	The Relationship between TQM and Job Satisfaction	159
4.6	The Relationship between School Climate and Job Satisfaction	160
4.7	The Dimensions of TQM as a predictors of School Climate	161
4.8	The Dimensions of TQM as a predictors of Job Satisfactions	162
4.9	School Climate as the mediator in the relationship between TQM and School Performance	164
4.10	Job Satisfaction as the mediator in the relationship between TQM and School Performance	168
4.11	Summary of Hypothesis Testing	170
4.12	Summary	171
CHAPTER 5 DISCUSSION AND RECOMMENDATIONS		174
5.1	Introduction	174
5.2	Summary of Research	174
5.3	Discussion	175
5.3.1	The level of TQM practices in high performance schools (HPS) and low performance schools (LPS)	175
5.3.2	The level of School Climate in high performance schools (HPS) and low performance schools (LPS)	178

5.3.3	The level of Job satisfaction in high performance schools (HPS) and low performance schools (LPS)	180
5.3.4	The Relationship between TQM practices and School Climate	181
5.3.5	The Relationship between TQM practices and Job Satisfaction	183
5.3.6	The Relationship between School Climate and Job Satisfaction	185
5.3.7	Dimensions of TQM can be a predictor of a School Climate	187
5.3.8	Dimensions of TQM can be a predictor of a Job Satisfaction	190
5.3.9	School Climate as a mediator in the relationship between TQM and School Performance	192
5.3.10	Job Satisfaction as a mediator in the relationship between TQM and School Performance	195
5.4	Implications of the Study	198
5.4.1	Theoretical Implication	198
5.4.2	Practical Implication	201
5.5	Recommendations for Future Studies	204
5.6	Conclusion	206
REFERENCES		214

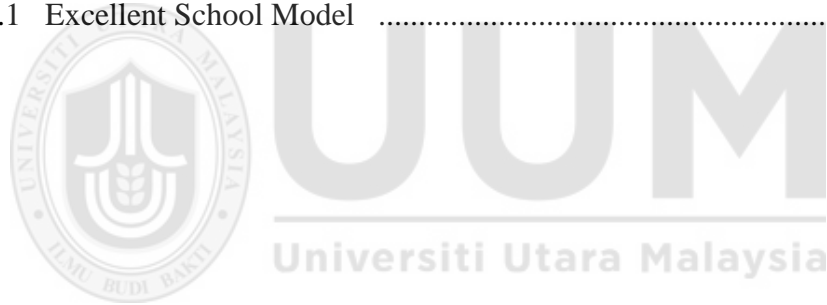
List of Tables

Table 1.1	Total No. of Primary and Secondary Schools in Pakistan	7
Table 1.2	Total Enrolment in Primary and Secondary Schools in Pakistan	7
Table 2.1	Comparison of Critical Factors of the Past	71
Table 2.2	Construct of TQM and Sources	72
Table 2.3	Maslow's Human Needs	83
Table 2.4	Frederick and Ornstein's Summary of Maslow's Theory in School	84
Table 3.1	The number of samples for each category of school	117
Table 3.2	Calculation of Sample Size	117
Table 3.3	Calculation of Male and Female Size	118
Table 3.4	TQM Practices Indicators with Sources	119
Table 3.5	Results of EFA for TQM practices	130
Table 3.6	Results of EFA for School Climate	133
Table 3.7	Results of EFA for Job Satisfaction	136
Table 3.8	Reliability Statistics for Pilot Study	138
Table 3.9	Classification min with interpretation for each variable	142
Table 3.10	Summary of Data Analysis	150
Table 4.1	Demographic Profile of Respondents	154
Table 4.2	The level of TQM practices in HPS and LPS	155
Table 4.3	The level of School Climate practices in HPS and LPS	157
Table 4.4	The level of Job Satisfaction practices in HPS and LPS	158
Table 4.5	Pearson correlation for TQM practices and School Climate	159
Table 4.6	Pearson correlation with TQM practices and Job Satisfaction	160
Table 4.7	Pearson correlation with School Climate and Job Satisfaction	161

Table 4.8	Regression Analysis results of TQM dimensions over School Climate	162
Table 4.9	Regression Analysis results of TQM dimensions over Job Satisfaction	163
Table 4.10	Coefficients of Regression between TQM and school climate	165
Table 4.11	Coefficients of Regression between TQM and mediator effect of School climate	166
Table 4.12	Sobel, Aroian & Goodman test for Mediating Effect	166
Table 4.13	Sobel test p-value	167
Table 4.14	Coefficient of regression between TQM and job satisfaction	168
Table 4.15	Coefficient of regression between TQM and mediator effect of job satisfaction	168
Table 4.16	Sobel, Aroian & Goodman test for Mediating Effect	169
Table 4.17	Sobel test p-value	170
Table 4.18	Summary of the research hypothesis testing method	170

List of Figures

Figure 1.1	Percentage of children by type of schools in Punjab, Pakistan	13
Figure 1.2	Framework of the study	22
Figure 2.1	Principles of TQM in Education (Scott & Palmer, 1994)	48
Figure 2.2	TQM model highlighted by Hoshin Kanri (2000)	52
Figure 2.3	Positive correlation between TQM and Job Satisfaction	53
Figure 2.4	TQM Dimensions	54
Figure 2.5	The Conceptualization and categorization of school climate	97
Figure 2.6	Bronfenbrenner's Ecological System Theory	102
Figure 3.1	Normal probability plot of regression standardized residuals	145
Figure 5.1	Excellent School Model	212



List of Abbreviations

TQM	Total Quality Management
NEP	National Education Policy
<i>ASER</i>	Annual Status of Education Report
NSCC	National School Climate Council
GDP	Gross Domestic Product
EFA	Education For All
MET&SHE	Ministry of Education, Training and Standards in Higher Education
NPA	National Plan of Action
PDCA	Plan, Do, Check, Act
SPC	Statistics Process Control
QC	Quality Control
QEFA	Quality Education For All
MDG	Millennium Development Goal
DAC	Development Administration Circular
QA	Quality Assurance (QA)
ACAP	Army Career and Alumni Program

List of Appendices

Appendix A	Questionnaire	238
Appendix B	Univariate outliers descriptive analysis.....	243
Appendix C	Value of skewness and kurtosis	246



CHAPTER ONE

INTRODUCTION

1.1 Introduction

In strengthening a nation's social and economic landscape, and also in delivering knowledge and capabilities to the future generations, education plays a crucial role. Not just that, education is also crucial, since it plays part in preparing a person's future personality. Education plays a very important part in the progress of nations due to rising worldwide rivalry in education and technology in the 21st century (Awan & Zia, 2015). The progress of nations depends on their quality of education which hence renders it a major concern worldwide (Akareem & Hossain, 2016; Masino, 2016). It is known for a fact that in globalized era, quality of education is deemed as a major requirement. Therefore, school institutions attempt to fulfill this demand and tackle the challenges that come with it by searching for an practical and innovative way of enhancing their total quality management system (Thiagaragan, Zairi, & Dale, 2001). There are very few studies on quality management with many challenges related to it due to different perceptions of quality particularly in developing countries (Gosen, Babbar & Prasad, 2005). Total quality management has been seen as one of the methods that can be used to improve educational quality.

The performance of schools everywhere is closely linked to the performance of their students, parents, teachers and relevant authorities. According to Martinez (2007), academic performance entails "the product given by the students and it is usually expressed through school grades".

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APPENDIX A

QUESTIONNAIRE

SECTION A: DEMOGRAPHIC INFORMATION

Please provide relevant information by placing a tick (✓) in the space provided.

Respondent Factors

1. Gender

☐ Male

☐ Female

2. Qualification

☐ Bachelors

☐ Masters

☐ Diploma/Certificate in teaching

☐ Other(please specify): _____

3. What is the length of service as a teacher?

☐ Less than < 5 years

☐ Less than 10 years

☐ More than 10 years

4. Have you attended any Course /Seminar /Briefing program on quality improvement?

☐ YES

☐ NO

School Factors

1. The Category of the school

☐ High

☐ Low

SECTION B: TQM PRACTICES AT SCHOOL LEVEL

Based on your knowledge and experience in the workplace, please answer the questions below on a scale which is as follows: (from 1: Very Low to 7: Very High).

Ranking:

1= Very Low (0-20%),

2 = Low (21-40%),




3 = Quite Low (41-50%),

4= Moderate (51-60%),

5 Quite High (61- 70%),

6 = High (71-80%),

7= Very High (81-100%)

No.	Top Management Commitment	Very Low  Very High						
		1	2	3	4	5	6	7
1	Top management is actively involved in quality management in my school.	1	2	3	4	5	6	7
2	Top management philosophy of delivering quality education to all teachers and staff.	1	2	3	4	5	6	7
3	Top management is encouraging the involvement of all teachers and staff in quality management.	1	2	3	4	5	6	7
4	Top management discusses many issues related to the quality of meeting the higher authorities.	1	2	3	4	5	6	7
5	Top management using TQM principles in leading the school.	1	2	3	4	5	6	7
6	My school has quality goals that have been deployed with a clear top management schools.	1	2	3	4	5	6	7
7	Top management should allocate resources to achieve quality goals.	1	2	3	4	5	6	7
8	Top management is actively developing an integrated quality plan to achieve the objectives of the school.	1	2	3	4	5	6	7
9	Top management should allocate resources to improve the quality.	1	2	3	4	5	6	7
10	Top management is actively involved in building the vision, goals, plans and value for the quality.	1	2	3	4	5	6	7
11	Top management strongly encourages employee involvement in quality management.	1	2	3	4	5	6	7
No.	Customer Focus	Very Low  Very High						
		1	2	3	4	5	6	7
1	My school collects information regarding customer complaints.	1	2	3	4	5	6	7
2	Customers focus has long held in my school.	1	2	3	4	5	6	7
3	The school conducts a customer satisfaction survey every year.	1	2	3	4	5	6	7
4	The school always fill questionnaire from internal and external customers to get recommendations for school improvement.	1	2	3	4	5	6	7
No.	Training and Education	Very Low  Very High						
		1	2	3	4	5	6	7
1	Training increases the quality of work. Research & development is given to teachers during their school career.	1	2	3	4	5	6	7
2	Quality awareness education provided to all teachers and staff.	1	2	3	4	5	6	7

3	Financial allocation provided for the training and education that lead to the achievement of quality in teaching.	1	2	3	4	5	6	7
4	Most of the staff at my school is very interested in attending a seminar or training program related to quality.	1	2	3	4	5	6	7
No.	Involvement of all staff	Very Low \longleftrightarrow Very High						
1	Teachers work together in improving the quality of schools.	1	2	3	4	5	6	7
2	All teachers and school staff are actively involved in programs to improve the quality of teaching and learning.	1	2	3	4	5	6	7
3	All teachers and school staff are committed to the success of the school.	1	2	3	4	5	6	7

No.	Continuous Improvement	Very Low \longleftrightarrow Very High						
1	Our school has a database that can provide information to be used in the process of continuous improvement.	1	2	3	4	5	6	7
2	My school uses the PDCA cycle (Plan-Do-Check-Act) widely for continuous improvement process.	1	2	3	4	5	6	7
3	Training in identifying problems and solving skills given to improving the quality of staff.	1	2	3	4	5	6	7

SECTION C: SCHOOL CLIMATE


No	Collaboration	Very Low \longleftrightarrow Very High						
1	Teaching in the classroom is rarely carried out in collaboration with other teachers.	1	2	3	4	5	6	7
2	I always have the opportunity to work with other teachers.	1	2	3	4	5	6	7
3	In my school there is good communication among teachers.	1	2	3	4	5	6	7
4	Work in groups that are not emphasized in my school.	1	2	3	4	5	6	7
5	I always talk about the needs of students with other teachers.	1	2	3	4	5	6	7
6	Teachers designed teaching program together.(Collaboration)	1	2	3	4	5	6	7

No	Student Relationship	<div>Very Low ←————→ Very High</div>						
1)	Most students behave well with school staff.	1	2	3	4	5	6	7
2)	The students at this school have a good behavior.	1	2	3	4	5	6	7
3)	Most of the students at this school are helpful and cooperate with teachers.	1	2	3	4	5	6	7
4)	Most of the students are motivated to learn.	1	2	3	4	5	6	7

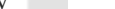
No	School Resources	<div>Very Low ←————→ Very High</div>						
1)	Supply of resources and equipment in these schools is not enough.	1	2	3	4	5	6	7
2)	Teaching equipment cannot be obtained consistent.	1	2	3	4	5	6	7
3)	Video equipment, tape and the film can be available for use.	1	2	3	4	5	6	7
4)	The school library has materials and resources.	1	2	3	4	5	6	7
No	Making Decision	<div>Very Low ←————→ Very High</div>						
1)	Teachers often asked to be involved in making decisions.	1	2	3	4	5	6	7
2)	Most of the teachers involved in my school management.	1	2	3	4	5	6	7
3)	Principal acknowledge of your decision making.	1	2	3	4	5	6	7


No	Teaching Innovation	<div>Very Low ←————→ Very High</div>						
1)	We are willing to try latest teaching approaches in my school.	1	2	3	4	5	6	7
2)	New ideas are always tried in my school.	1	2	3	4	5	6	7
3)	The teachers in this school are innovative.	1	2	3	4	5	6	7
4)	New curriculum ingredients rarely used in my school.	1	2	3	4	5	6	7

SECTION D: JOB SATISFACTION

No	Salary and Incentives	Very Low  Very High						
		1	2	3	4	5	6	7
1)	Teacher income is barely enough to live on.	1	2	3	4	5	6	7
2)	Teacher income is adequate for normal expenses.	1	2	3	4	5	6	7
3)	Teaching provides me with financial security.	1	2	3	4	5	6	7
4)	Teacher income is less than I deserve.	1	2	3	4	5	6	7
5)	I am well paid in proportion to my ability.	1	2	3	4	5	6	7

No	Working Conditions	Very Low \longleftrightarrow Very High						
		1	2	3	4	5	6	7
1)	Working conditions in my school are good.	1	2	3	4	5	6	7
2)	Working conditions in my school are comfortable.	1	2	3	4	5	6	7
3)	Physical surroundings in my school are unpleasant.	1	2	3	4	5	6	7
4)	Working conditions in my school can be improved.	1	2	3	4	5	6	7
5)	The administration in my school communicates its policies well.	1	2	3	4	5	6	7

No	Security	Very Low  Very High						
		1	2	3	4	5	6	7
1)	I am afraid of losing my teaching job.	1	2	3	4	5	6	7
2)	Teaching provides for a secure future.	1	2	3	4	5	6	7
3)	I never feel secure in my teaching job.	1	2	3	4	5	6	7

No	Advancements	Very Low  Very High						
		1	2	3	4	5	6	7
1)	Teaching provides a good opportunity for advancement.	1	2	3	4	5	6	7
2)	Teaching provides an opportunity for promotion.	1	2	3	4	5	6	7
3)	Teaching provides me with an opportunity to advance professionally.	1	2	3	4	5	6	7
4)	Teaching provides limited opportunities for advancement.	1	2	3	4	5	6	7
5)	I am not getting ahead in my present teaching position.	1	2	3	4	5	6	7

APPENDIX B

Univariate outliers' descriptive analysis

univariate outliers' descriptive analysis

Descriptive Statistics		
Measured variables	Minimum	Maximum
Zscore(TMC1)	-2.11327	2.16092
Zscore(TMC2)	-1.98704	1.87806
Zscore(TMC3)	-1.34529	2.10271
Zscore(TMC4)	-1.61236	1.94089
Zscore(TMC5)	-2.23178	2.00930
Zscore(TMC6)	-1.63025	2.32855
Zscore(TMC7)	-2.71575	1.89876
Zscore(TMC8)	-2.01546	1.88997
Zscore(TMC9)	-2.56525	1.84679
Zscore(TMC10)	-2.31507	1.58601
Zscore(TMC11)	-1.84098	1.71281
Zscore(CF1)	-1.45132	2.31274
Zscore(CF2)	-2.24446	1.52514
Zscore(CF3)	-1.70848	2.53375
Zscore(CF4)	-1.94020	2.62351
Zscore(TE1)	-1.18481	2.61906
Zscore(TE2)	-1.87297	2.63932
Zscore(TE3)	-2.43380	2.46917
Zscore(TE4)	-2.96937	1.78058
Zscore(IS1)	-1.97574	2.04696
Zscore(IS2)	-2.63350	2.33999

Zscore(IS3)	-1.22313	1.78538
Zscore(CI1)	-2.14239	1.84194
Zscore(CI2)	-2.10814	2.13130
Zscore(CI3)	-2.34844	2.06846
Zscore(Cob1)	-2.05024	2.81231
Zscore(Cob2)	-1.94542	2.03682
Zscore(Cob3)	-2.39014	2.01199
Zscore(Cob4)	-1.71981	2.14280
Zscore(Cob5)	-1.72909	1.79613
Zscore(Cob6)	-1.46066	2.28305
Zscore(StR1)	-1.51953	2.35067
Zscore(StR2)	-2.28196	2.66121
Zscore(StR3)	-2.42562	2.35251
Zscore(StR4)	-2.31861	2.18570
Zscore(ScR1)	-2.70610	2.71796
Zscore(ScR2)	-2.73212	2.60952
Zscore(ScR3)	-2.45312	2.55158
Zscore(ScR4)	-2.71099	2.54443
Zscore(Mkng_Dec1)	-2.72344	2.27545
Zscore(Mkng_Dec2)	-3.08662	2.25224
Zscore(Mkng_Dec3)	-2.63040	2.05212
Zscore(Teach_Inno1)	-2.56952	2.28814
Zscore(Teach_Inno2)	-2.60976	2.23391
Zscore(Teach_Inno3)	-2.65462	2.16957
Zscore(Teach_Inno4)	-2.68851	2.44716

Zscore(Saly_Inc1)	-2.50324	1.24855
Zscore(Saly_Inc2)	-1.13555	2.56207
Zscore(Saly_Inc3)	-2.25905	2.31150
Zscore(Saly_Inc4)	-3.28171	2.40535
Zscore(Saly_Inc5)	-2.56947	2.88544
Zscore(Wrk_Cond1)	-2.55196	2.63127
Zscore(Wrk_Cond2)	-2.73945	2.72155
Zscore(Wrk_Cond3)	-1.99891	1.82745
Zscore(Wrk_Cond4)	-2.14505	.96298
Zscore(Wrk_Cond5)	-3.15540	1.90098
Zscore(Sec1)	-1.90126	2.49180
Zscore(Sec2)	-2.81461	2.19388
Zscore(Sec3)	-1.95514	2.42311
Zscore(Adv1)	-2.28874	2.76970
Zscore(Adv2)	-1.84662	2.35651
Zscore(Adv3)	-2.26673	2.50780
Zscore(Adv4)	-2.89860	1.91486
Zscore(Adv5)	-2.21217	2.13147

APPENDIX C

Value of skewness and kurtosis

Values of skewness and kurtosis for each measured variables

Measured variables	Skewness	Kurtosis
TMC1	.365	-.581
TMC2	.087	-1.198
TMC3	.164	-.966
TMC4	-.166	-1.165
TMC5	-.029	-.587
TMC6	-.003	-.329
TMC7	-.073	-.141
TMC8	.180	-1.213
TMC9	.052	-1.371
TMC10	.306	-1.248
TMC11	-.478	-.942
CF1	.133	-.835
CF2	-.094	-1.158
CF3	.842	-.265
CF4	.794	.089
TE1	.955	-.144
TE2	.668	-.539
TE3	1.709	1.774
TE4	.134	-.585
IS1	.241	-1.186
IS2	.312	-.997
IS3	.128	-1.348
CI1	-.111	-1.185
CI2	.183	-.847
CI3	.301	-.771
Cob1	.019	-.294
Cob2	.111	-1.341
Cob3	-.073	-.815
Cob4	.351	-1.161
Cob5	.341	-1.207
Cob6	.424	-.934
StR1	-.013	-.322
StR2	.389	-.382
StR3	.334	-.918
StR4	-.086	-.963
ScR1	.365	-.897
ScR2	.368	-.664
ScR3	-.128	-.429

ScR4	.160	-.679
Mkng_Dec1	.170	-1.179
Mkng_Dec2	.064	-.560
Mkng_Dec3	.083	-1.255
Teach_Inno1	.509	-.892
Teach_Inno2	.250	-1.056
Teach_Inno3	.041	-1.036
Teach_Inno4	.533	-.742
Saly_Inc1	-.455	-.601
Saly_Inc2	.963	.899
Saly_Inc3	.548	.210
Saly_Inc4	-.835	1.664
Saly_Inc5	.648	.021
Wrk_Cond1	.679	-.509
Wrk_Cond2	.595	-.245
Wrk_Cond3	-.631	-.859
Wrk_Cond4	-.589	-.966
Wrk_Cond5	-.314	-.822
Sec1	.227	.945
Sec2	.090	.917
Sec3	.601	.299
Adv1	.302	.012
Adv2	-.108	-.440
Adv3	-.155	-.511
Adv4	.161	.245
Adv5	.525	-.677

Note: Normality was perfect when absolute values of skewness and kurtosis were less than 2.0 (Tabachnick & Fidell, 2014). Z- kurtosis value was less than 10.